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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,545	07/05/2006	**Stephane Tuffin**	127745	3849

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EXAMINER	
CHAO, MICHAEL W	
ART UNIT	**PAPER NUMBER**
2442	

NOTIFICATION DATE	DELIVERY MODE
05/25/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/576,545	TUFFIN ET AL.	
	Examiner	Art Unit	
	Michael Chao	2442	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 April 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This action is in response to applicant's arguments filed 4/28/2010, which was in response to USPTO Office Action mailed 2/03/2010.

Claims 1-17 are pending.

Response to Arguments

Applicant's arguments filed 4/28/2010 have been fully considered but they are not persuasive.

Applicant's argument (page 6) that Richmond in view of Ghys does not teach "authorizing transmission of the packet only if the estimated bit rate value for the packet does not exceed the predetermined maximum authorized bit rate value for packets of initialization messages", is not persuasive. Richmond explicitly discloses that when a rate limit is reached packets will be dropped. ("a network device may be configured to drop some or all of the bytes of a packet that contains an amount of [bytes] that exceeds the threshold amount during the unit interval." Richmond column 19 line 59; see also column 15 line 44). Therefore, if the packets received do not exceed this rate limit, they will be forwarded (Richmond column 19 line 65). Authorizing transmission if a bit rate value is not exceeded is fairly interpreted as forwarding the packet if the rate limit is not exceeded. Applicant's argument is not persuasive.

Applicant's argument (page 7) that Richmond in view of Ghys as combined teaches monitoring an amount rather than a rate as claimed by Applicant (page 8 line

2), is not persuasive. To elaborate, Applicant points to the disclosure of Ghys to state that the combination of Richmond in view of Ghys monitors the amount of data per packet, rather than the data rate for multiple packets. While Ghys does disclose that his particular embodiment where SIP initialization packets are limited per packet (Ghys column 6 line 18), the combination of Richmond in view of Ghys as applied to claim 1 and 8 uses the rate limiting of Richmond rather than the per packet 'amount' of Ghys (OA dated 2/03/2010), this is further clarified below. As the rate limit of Richmond is a bit rate value (as claimed), the recited combination of Richmond in view of Ghys teaches the limitation argued (bit rate value). Applicants argument is not persuasive.

Applicant's argument (page 8) that Richmond could not have been combined with Ghys to yield predictable results is not persuasive. The applicable section of the MPEP (2143.02) states that "The prior art can be modified or combined to reject claims as prima facie obvious as long as there is a reasonable expectation of success." Richmond and Ghys are fundamentally software method steps; therefore, there is a reasonable expectation of success since software code is within the skill of the art (See e.g. MPEP 2161.01(II)). While Applicant further states that Richmond in view of Ghys are directed to different problems, control of network resources and charging; They are commonly directed to control of network resources. Further in addition to the provided rationales below, the MPEP explicitly provides that the "(F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art" (MPEP 2143) is a rationale for obviousness. In the

present case the known monitoring SIP invite messages (Ghys), would prompt varying Richmond by preventing uninhibited transmission of SIP invite messages. Applicant's argument is not persuasive.

Applicant's argument (page 8) that Ghys teaches away from (contradicts) the proposed combination is not persuasive. Regardless of the particular embodiments disclosed, Ghys still discloses that SIP initialization messages may transmit additional data that circumvents carrier restrictions, and should be limited. Therefore the combination of Richmond in view of Ghys may rate limit the packets according to Richmond and drop packets that exceed this limit (Richmond column 19 line 59), or 'authorizing' as claimed.

Applicant's further argument (page 8) that Ghys does not teach various features is irrelevant as Richmond was cited to teach those features.

Applicant's further arguments depend on those addressed and are not persuasive for the reasons stated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4-9 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al. (US 6,990,592) in view of, Ghys (US 7,076,039).

With respect to claims 1, 8, Richmond teaches: A method of monitoring multimedia stream exchange session initialization messages transmitted in packet mode via a monitoring server over a network between a sender terminal and one or more receiver terminals, the method comprising the following steps:

Estimating a bit rate value ("rate limit" Richmond column 19 line 43) for at least one packet amongst a plurality of initialization message packets ("packet rules may be configured to examine . . . application layer" Richmond column 15 lines 46-50; See also Applicant's specification page 1 line 20) received by the monitoring server; ("packet rules associated with the users may be provisioned to the entry point and applied to packets received from the users" Richmond column 13 line 54)

Comparing the estimated bit rate value to a predetermined maximum authorized bit rate value for packets of initialization messages; and ("rate limit field 520 may specify a threshold value (e.g., 1 megabyte (MB)). This threshold value may specify a threshold volume of bytes that may be received during a specified temporal interval" Richmond column 19 line 43; Also "limit the amount of bandwidth that a user consumes on the network in sending packets corresponding to a particular application" Richmond column 19 line 65)

Authorizing transmission of the packet only if the estimated bit rate value for the packet does not exceed the predetermined maximum authorized bit rate value for packets of initialization messages. ("a network device may be configured to drop some or all of the bytes of a packet that contains an amount of [bytes] that exceeds the

threshold amount during the unit interval." Richmond column 19 line 59; see also column 15 line 44).

Richmond does not specifically teach that the application layer is parsed for initialization packets.

Ghys teaches that SIP signaling messages are distinct from other data consumption by a user (column 1 line 40) in that they are not typically billed for (column 1 line 54). This is stated to be because a user may include user data that could evade prior art billing policies (Ghys column 1 line 55) and that it is therefore necessary to analyze SIP INVITE messages and compare them to a threshold (Ghys column 6 line 18). Ghys states that these methods are desirable to prevent theft of service (Ghys column 1 line 48).

A person of ordinary skill in the art at the time of invention would have modified Richmond with the teachings of Ghys by including specific SIP messaging parsing of Ghys with the rate limiting rules of Richmond.

It would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify Richmond with Ghys in order to prevent theft of service (Ghys column 1 line 48) by controlling usage of network resources by users (Richmond column 1 line 26).

Stated another way, Richmond teaches rate limiting (column 19 line 65) specific application layer packets (column 15 lines 46-50) of which SIP initialization packets are a type of (Applicant's specification page 1 line 20). Therefore, Richmond substantially teaches the elements of claim 1, as seen above. Richmond while able to perform the

limitations of claim 1 lacks the further specification that SIP initialization packets are specifically rate limited. Ghys discloses both that SIP initialization messages enable the transfer of data that is undesired (Ghys column 1 line 55) and that they should be specifically monitored (Ghys column 5 line 55). Therefore, a person with the invention of Richmond knowing the undesirability of SIP initialization messages as taught by Ghys would have prevented the uninhibited transmission of SIP initialization messages by rate limiting them. This would have been obvious because Richmond is directed toward limiting customer use of bandwidth, and because Ghys discloses that SIP initialization messages may undesirably consume bandwidth.

With respect to claims 4, 9, Richmond teaches: wherein the monitoring server also processes packets of session initialization messages. ("the packet rules may be applied to each packet received from the user before any network resources beyond the entry point are used." Richmond column 13 line 47)

With respect to claim 5, Richmond in view of Ghys teaches: wherein the packets of the session initialization messages are forcibly routed to the monitoring server consisting of the first processor server through which said session initialization packets pass. ("the packet rules may be applied to each packet received from the user before any network resources beyond the entry point are used." Richmond column 13 line 47; Also, Call Server CS described with Signaling Message Analysis Means, Ghys column 4 lines 12-22)

With respect to claim 6, Richmond in view of Ghys teaches: wherein the monitoring server consists of a session initialization packet processor server of the network, and routing rules are defined to ensure that the packets of the session initialization messages systematically pass in transit through the processor server. ("the packet rules may be applied to each packet received from the user before any network resources beyond the entry point are used." Richmond column 13 line 47; Also, Call Server CS described with Signaling Message Analysis Means, Ghys column 4 lines 12-22)

With respect to claim 7, Richmond in view of Ghys teahes: monitoring messages transmitted in packet mode, wherein the session initialization messages transmitted use the Session Initialization Protocol (SIP). ("the packet rules may be applied to each packet received from the user before any network resources beyond the entry point are used." Richmond column 13 line 47; Also, Ghys column 4 line 20).

With respect to claims 15-17, Richmond in view of Ghys teaches: monitoring messages transmitted in packet mode, implemented by the monitoring server, which also processes packets of session initialization messages. ("the packet rules may be applied to each packet received from the user before any network resources beyond the entry point are used." Richmond column 13 line 47; Also, Ghys column 4 line 20).

Claims 2, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al. (US 6,990,592) in view of, Ghys (US 7,076,039), in further view of Vaid et al. (US 6,502,131).

Concerning claim 2, Richmond in view of Ghys teaches: monitoring messages transmitted in packet mode, wherein a transmission channel associated with specific maximum authorized bit rate value for packets of initialization messages is defined. ("a network device may be configured to drop some or all of the bytes of a packet that contains an amount of [bytes] that exceeds the threshold amount during the unit interval." Richmond column 19 line 59; see also column 15 line 44).Richmond in view of Ghys does not teach: for each pair comprising a sender terminal and a receiver terminal.

Vaid discusses endpoint defined (Sender, receiver. Vaid column 27 line 32) bandwidth limits ("bandwidth allocated" Vaid column 27 line 33.)

A person of ordinary skill in the art would have modified the rules of Richmond in view of Ghys to include the endpoint defined bandwidth of Vaid in addition to the layer classification of Ghys.

It would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify the invention in order to allow for more atomic definitions, as done in Vaid.

With respect to claims 11 and 13 Richmond in view of Ghys in view of Vaid teaches: monitoring messages transmitted in packet mode, implemented by the monitoring server, which also processes packets of session initialization messages. ("the packet rules may be applied to each packet received from the user before any network resources beyond the entry point are used." Richmond column 13 line 47; Also, Ghys column 4 line 20).

Claims 3, 12 and 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al. (US 6,990,592) in view of, Ghys (US 7,076,039), in view of Official Notice.

Concerning claim 3, Richmond in view of Ghys teaches: storing the sizes of the latest packets of the initialization message sent by the sender terminal to the receiver terminal and received by the monitoring server during a predetermined duration; ("Rate limit field may specify a threshold value . . . threshold volume of bytes that may be received during a specified temporal interval" column 19 line 50). Richmond also discloses that in a standard case where the time interval is one second, the rate data structure is generally a rate of bytes per unit of time (Richmond column 19 line 55). Richmond in view of Ghys does not teach: dividing the sum of the sizes of the stored packets by the predetermined duration. It is however common knowledge that rates are a measure of a metric over a unit of time (conceptually as shown in Richmond). Official notice is taken thereof. Therefore if the bandwidth limiting was desired to be in bytes per second, and the 'specified temporal interval' was larger than one second (as contemplated by Richmond), it would have been obvious to divide the threshold volume by the number of seconds. It would have been obvious at the time the invention was made to a person of ordinary skill in the art in order to obtain bytes per second.

With respect to claims 12 and 14 Richmond in view of Ghys in view of in view of Official Notice teaches: monitoring messages transmitted in packet mode, implemented by the monitoring server, which also processes packets of session initialization messages. ("the packet rules may be applied to each packet received from the user

before any network resources beyond the entry point are used." Richmond column 13 line 47; Also, Ghys column 4 line 20).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al. (US 6,990,592) in view of, Ghys (US 7,076,039), in view of Vaid et al. (US 6,502,131), in view of Official Notice.

Concerning claim 10, Richmond in view of Ghys in view of Vaid, as combined in claim 2, teaches: storing the sizes of the latest packets of the initialization message sent by the sender terminal to the receiver terminal and received by the monitoring server during a predetermined duration; ("Rate limit field may specify a threshold value . . . threshold volume of bytes that may be received during a specified temporal interval" column 19 line 50). Richmond also discloses that in a standard case where the time interval is one second, the rate data structure is generally a rate of bytes per unit of time (Richmond column 19 line 55). Richmond in view of Ghys in view of Vaid does not teach: dividing the sum of the sizes of the stored packets by the predetermined duration. It is however common knowledge that rates are a measure of a metric over a unit of time (conceptually shown in Richmond). Official notice is taken thereof. Therefore if the bandwidth limiting was desired to be in bytes per second, and the 'specified temporal interval' was larger than one second (as contemplated by Richmond), it would have been obvious to divide the threshold volume by the number of seconds. It would have been obvious at the time the invention was made to a person of ordinary skill in the art in order to obtain bytes per second.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Chao whose telephone number is (571)270-5657. The examiner can normally be reached on 8-4 Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Lee can be reached on (571)272-3967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. C./
Examiner, Art Unit 2442

/Philip C Lee/
Acting Supervisory Patent Examiner, Art Unit 2442